

CLAIMS

1. A wound care device comprising chitosan, said chitosan being capable of absorbing liquid to form a swollen, coherent gel, characterised in that said chitosan, being in the form of fibres, having been modified by treatment with acid in a solvent which is not able to dissolve the chitosan fibres and by treatment with heat.
2. A wound care device according to claim 1, characterised in that the chitosan has a viscosity of less than 1000 cP, more preferred less than 500 cP, even more preferred less than 300 cP and most preferred from 40 to 200 cP,
- 10 measured on a 1% w/w chitosan solution in 1% aqueous solution of acetic acid.
3. A wound care device according to claim 1 or 2, characterised in that the proportion between length and diameter of the fibres is at least 25, more preferred more than 80 and most preferred more than 200.
4. A wound care device according to any of claims 1 - 3, characterised in that the
- 15 chitosan fibres have an absorption higher than 20 g/g, more preferred higher than 25 g/g and most preferred higher than 30 g/g.
5. A wound care device according to any of claims 1 - 4, characterised in that the acid is an hydroxy or acyl organic acid, which is soluble in the solvent used, preferably glycolic, glyoxylic, pyruvic, lactic or a hydroxy propionic/butanic acid.
- 20 6. A wound care device according to any of claims 1 - 5, characterised in that the heat treatment of the chitosan is carried out at a temperature of 50 - 250°C.
7. A wound care device according to any of claims 1-6, characterised in that the fibres are manufactured into a fibre rope, knitted, woven or non-woven sheet or pouch or in the form of an island dressing.
- 25 8. A wound care device according to any of claims 1 - 7, characterised in that the device comprises from 0 - 60 % of fibres other than chitosan.

9. A wound care device according to any of claims 1- 8, characterised in that the acid is a mixture of at least two acids.

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10. A wound care device according to any of claims 1-9, characterised in that the ratio of acid to chitosan is from 2 mmol to 20 mmol acid per gram chitosan, more preferred from 3 to 15 mmol acid per gram chitosan and most preferred from 4 to 10 mmol acid per gram chitosan.

11. A wound care device according to any of claims 1-9, characterised in that the ratio of acid to chitosan is from 2 to 7.5 mmole acid per gram chitosan, more preferred 3 - 7.5 mmole acid per gram chitosan and most preferred from 5 to 7 mmole acid per gram chitosan.

12. A method of preparation of a wound care device comprising chitosan (being capable of absorbing liquid to form a swollen, coherent gel, said method comprises the steps of

- a) suspending the chitosan in the form of fibres in a solvent, which is not able to dissolve the chitosan fibres, comprising acid
b) isolating the resulting modified chitosan fibres from the solvent
c) treating the chitosan fibres with heat during step a) or/and b).

13. A method of preparation of a wound care device according to claim 12, characterised in that the fibres are manufactured into a fibre rope, knitted, woven or non-woven sheet or fabric.